

REMARKS

The last Office Action of March 23, 2006 has been carefully considered. Reconsideration of the instant application in view of the foregoing amendments and the following remarks is respectfully requested.

On page 1 of the Office Action, the Examiner acknowledged the receipt of a certified copy of the priority document from the International Bureau. It is noted for the record that the instant patent application was not filed under 35 U.S.C. §371 but as a bypass continuation application under 37 C.F.R. §1.53(b) of the international application Number PCT/EP02/07984, and that applicant submitted the certified copy of the priority document together with applicant's communication of May 13, 2004. The Examiner is respectfully requested to check the appropriate box in a next communication.

Claims 1-8 are pending in the application. Claims 2, 5, 7 have been amended. Claims 1, 4 have been canceled. Claims 9-11 have been added. No amendment to the specification has been made. No fee is due.

Claims 1-8 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Pat. No. 6,443,722 to Castelli et al.

Claims 1 and 4 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Pat. No. 5,540,495 to Pickel.

Claims 1-8 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Pickel in view of U.S. Pat. No. 4,693,676 to Inaba.

Applicant has canceled independent claim 1 in favor of claim 2 which has been rewritten in independent form to include only those limitations of originally filed claim 2. In addition, applicant has canceled independent claim 4 in favor of claim 5 which has been rewritten in independent form to include only those limitations of originally filed claim 5. Accordingly, applicant asserts that claims 2 and 5 have not been narrowed to trigger prosecution history estoppel. See *Salazar v. Procter & Gamble Co.*, 75 USPQ2d, 1369 (stating that introducing claim 7 based on the allowable subject matter of dependent claim 3 of the "149 application

was not a narrowing amendment for purposes of patentability and, therefore, does not by itself give rise to prosecution history estoppel).

Independent claim 7 has been amended to correct an obvious typographic error by deleting the dual inclusion of the word "and". Claims 9-11 have been added and set forth the independent operation of the first and second motors during the injection phase. Support therefore can be found in paragraph [0018] of the instant specification.

Applicant respectfully disagrees with the Examiner's rejection of original claims 2, 5 and 7 as being anticipated by Castelli et al. for the following reasons:

The present invention, as set forth in claims 2, 5 and 7 is directed to a control method and system for controlling a back pressure in an injection molding machine by determining rotation speed values from respective control circuits for the two motors **and** using the rotation speed value from the control circuit for the motor implementing the rotation of the screw during plasticizing operation as rotation speed input value for the control circuit of the other motor. Thus, there exists, in effect, a master-slave relationship between the two control circuits.

The Castelli reference describes an electric injection assembly having two motors to actuate a plasticating screw in translation movement in the injection stage, and rotation movement in the plasticating stage. While mentioning the possibility to vary the differential speed to provide a desired load value to be excited on the plasticating screw, Castelli fails to set forth a master-slave relationship between the two control circuits, as set forth in claims 2, 5, and 7.

In addition, in Castelli, both motors are controlled in such a manner that in the injection stage, **both** motors rotate. Reference is made to col. 3, lines 27 to 32, where it is described that in the injection stage *"it is necessary to control the two motors 32A and 32B to give the same speed of rotation"*. Claims 9-11 have been added to expressly set forth the absence of any rotation of the second motor, as the first motor rotates to execute the injection stage.

Withdrawal of the rejection of claims 1-8 under 35 U.S.C. §102(e) as anticipated by Castelli is thus respectfully requested.

The rejection of claim 1 and 4 under 35 U.S.C. §102(b) as anticipated by Pickel becomes moot in view of the amendments to the claims.

Applicant respectfully disagrees with the Examiner's rejection of original claims 2, 5 and 7 as being unpatentable over Pickel in view of Inaba for the following reasons:

Pickel fails to disclose a control system, as set forth in claims 2, 5 and 7, as acknowledged by the Examiner. To bridge the absence of teaching in Pickel, the Examiner combined Pickel with Inaba.

Inaba describes a screw-rotating/injection mechanism, using two servo motors M1, M2, whereby the drive current of the servo motor M2 is controlled by a servo circuit, thereby controlling the back pressure to the screw by the servo motor M2. Apart from the fact that no servo circuit is actually shown (see also col. 2, line 55), Inaba is also silent about any relative rotation speeds of both motors. The reference to a servo circuit *per se*, without illustration and without giving any details about input variables whatsoever cannot be interpreted so broadly to cover any type of control circuit.

It is also applicant's contention that a combination of Pickel and Inaba would not produce the present invention, as set forth in claims 2, 5 and 7. Pickel describes that the speed differential between the first and second motors results in the speed of withdrawal of the extrusion screw (col. 3, lines 39-42). A combination of Pickel and Inaba would lead a fact finder merely to the conclusion to control a rotation speed differential, as taught in Pickel, for operating the servo motor M2, as taught in Inaba. A master-slave relationship, as set forth in claims 2, 5, and 7 is not produced.

Withdrawal of the rejection of claims 1-8 under 35 U.S.C. §103(a) as being unpatentable over Pickel in view of Inaba is thus respectfully requested.

For the reasons set forth above, it is applicant's contention that neither Castelli, nor Pickel, nor Inaba, nor any combination thereof teaches or suggests the features of the present invention, as recited in claims 2, 5, 7.

As for the rejection of the dependent claims, these claims depend on claims 2, 5, 7, respectively, share their presumably allowable features, and therefore it is respectfully submitted that these claims should also be allowed.

Applicant has also carefully scrutinized the further cited prior art and finds it without any relevance to the claims on file. It is thus felt that no specific discussion thereof is necessary.

Applicant believes that when reconsidering the claims in the light of the above comments, the Examiner will agree that the invention is in no way properly met or anticipated or even suggested by any of the references however they are considered.

In view of the above presented remarks and amendments, it is respectfully submitted that all claims on file should be considered patentably differentiated over the art and should be allowed.

Reconsideration and allowance of the present application are respectfully requested.

Should the Examiner consider necessary or desirable any formal changes anywhere in the specification, claims and/or drawing, then it is respectfully requested that such changes be made by Examiner's Amendment, if the Examiner feels this would facilitate passage of the case to issuance. If the Examiner feels that it might be helpful in advancing this case by calling the undersigned, applicant would greatly appreciate such a telephone interview.

Respectfully submitted,

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